Name: Date: Period:

**Animal Cell Model – Cells Alive Website**

[www.cellsalive.com/cells/3dcell.htm](http://www.cellsalive.com/cells/3dcell.htm)

Click on Take Me to the Animation, then click on Animal Cell

1. What is found within the nucleus? What is its function?

2. What do mitochondria do?

3. How big are mitochondria?

4. What does the Golgi Apparatus do?

5. What is the difference between smooth and rough ER?

6. What does the nucleolus do?

7. What does the cytoskeleton do?

8. What is the cytoplasm?

9. Cytosol goes by what other name?

10. What is the function of the cytosol?

11. What is the function of the lysosome?

12. What are ribosomes?

**Plant Cell Model – Cells Alive Website**

1. What do plant cells have that animals cells don’t?

2. What makes the plant cells green?

3. In plant cells, what does the vacuole do?

**Draw the following organelles below:**

Mitochondria Nucleus

Golgi Apparatus Lysosome

Smooth Endoplasmic Reticulum Vacuole

Rough Endoplasmic Reticulum

Name: Date: Period:

**Animal Cell Model – Cells Alive Website KEY**

[www.cellsalive.com/cells/3dcell.htm](http://www.cellsalive.com/cells/3dcell.htm)

Click on Take Me to the Animation, then click on Animal Cell

1. What is found within the nucleus? What is its function? **DNA – providing the cell with its unique characteristics**

2. What do mitochondria do? **Provide the energy a cell needs to move, divide, or produce secretory products, contract; “powerhouses of the cell”**

3. How big are mitochondria? **About the size of bacteria**

4. What does the Golgi Apparatus do? **Packages macromolecules for transport elsewhere**

5. What is the difference between smooth and rough ER? **Smooth ER lacks numerous ribosomes on surface; have different functions**

6. What does the nucleolus do? **Produces ribosomes**

7. What does the cytoskeleton do? **Helps to maintain cell shape and cell motilit**

8. What is the cytoplasm? **Cytosol + organelles suspended in cytosol**

9. Cytosol goes by what other name? **“soup”**

10. What is the function of the cytosol? **Cellular metabolism**

11. What is the function of the lysosome? **Intracellular digestion**

12. What are ribosomes? **Packets of RNA and protein; used for protein synthesis**

**Plant Cell Model – Cells Alive Website**

1. What do plant cells have that animals cells don’t? **cell wall**

2. What makes the plant cells green? **Chloroplasts**

3. In plant cells, what does the vacuole do? **Store nutrients and waste products, helps increase cell size during growth, act like lysosomes, regulates turgor pressure**

**Draw the following organelles below:**

Mitochondria Nucleus

Golgi Apparatus Lysosome

Smooth Endoplasmic Reticulum Vacuole

Rough Endoplasmic Reticulum